

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-35 (previously canceled)

Claim 36 (canceled)

Claim 37 (currently amended): An optoelectronic module comprising:

a fiber optics ferrule supporting a set of optical fibers and having a ferrule alignment structure;

an optoelectronic device; and

a silicon substrate carrier adapted to support said optoelectronic device, said silicon substrate carrier including:

a) a plurality of electrically conductive traces for carrying signals to at least one of the optoelectronic device and other devices mounted on said silicon substrate carrier,

b) a carrier alignment structure for cooperating with said ferrule alignment structure and aligning said silicon substrate carrier with said fiber optics ferrule, and

c) at least one alignment mark constructed on said silicon substrate carrier and precisely aligned relative to said carrier alignment structure for use in

precisely positioning and mounting at least one of the optoelectronic device and
the other devices on said silicon substrate carrier, and wherein
the optoelectronic device comprises a set of photoactive components which is mounted
on the silicon substrate carrier with reference to the at least one alignment mark so that said
optical fibers are aligned with said photoactive components when said silicon substrate carrier is
aligned with said fiber optics ferrule, and wherein

The optoelectronic module of claim 36, in which:

said ferrule alignment structure comprises a set of alignment holes, and

said carrier alignment structure comprises a set of alignment apertures in said silicon
substrate carrier and guide pins extending through said set of alignment apertures.

Claim 38 (previously presented): The optoelectronic module of claim 37, further
including:

a support block having at least one support passage formed therein to receive the guide
pins for securely supporting said guide pins and said silicon substrate carrier in precisely aligned
positions.

Claim 39 (canceled)

Claim 40 (canceled)

Claim 41 (previously presented): The optoelectronic module of claim 38, wherein:

said guide pins are cemented into said at least one support passage of said support block.

Claim 42 (currently amended): An optoelectronic module comprising:

a fiber optics ferrule supporting a set of optical fibers and having a ferrule alignment structure;

an optoelectronic device;

a silicon substrate carrier adapted to support said optoelectronic device, said silicon substrate carrier including:

a) a plurality of electrically conductive traces for carrying signals to at least one of the optoelectronic device and other devices mounted on said silicon substrate carrier,

b) a carrier alignment structure for cooperating with said ferrule alignment structure and aligning said silicon substrate carrier with said fiber optics ferrule, and

c) at least one alignment mark constructed on said silicon substrate carrier and precisely aligned relative to said carrier alignment structure for use in precisely positioning and mounting at least one of the optoelectronic device and the other devices on said silicon substrate carrier, and wherein

the optoelectronic device comprises a set of photoactive components which is mounted on the silicon substrate carrier with reference to the at least one alignment mark so that said optical fibers are aligned with said photoactive components when said silicon substrate carrier is aligned with said fiber optics ferrule, and wherein

said silicon substrate carrier further includes a window section extending through said silicon substrate carrier, and a transparent layer disposed over said window section; and

~~The optoelectronic module of claim 39, further including:~~

a set of metal traces deposited as a grid on said transparent film layer for use in suppressing EMI emissions.

Claim 43 (original): The optoelectronic module of claim 38, wherein:

said photoactive components comprise vertical cavity surface-emitting semiconductor lasers.

Claims 44-50 (previously canceled)